

ABSTRACT

The present invention belongs to the field of surface modification of solid materials, specifically relates to a method of changing the surface wettability of polymer materials. The method of the present invention comprises of rubbing the surface of the polymer materials various times by using sand paper of different grades (GB/T 15305) with a determined pressure at the ambient temperature, so as to change the contact angle of said surface of polymer material with water thereby changing the surface wettability of the polymer materials to different degrees. The method of the present invention has advantages of using devices that are simple, low cost, and the surface characteristics of the polymer materials could be changed from hydrophilicity to hydrophobicity, from hydrophobicity to super hydrophobicity, or from hydrophilicity to super hydrophilicity, at ambient temperature without any special requirement to the polymer materials or the preparation process thereof.